

Appendix D

Hazardous Materials Appendix



APPENDIX D

Hazards and Hazardous Materials

This appendix supplements the information provided in Section 3.6 of the EIR. It provides an overview of wildland fire safety regulations related to construction activities and documents regulatory databases reviewed to identify permitted hazardous materials uses and environmental cases within ASTM International search distances from where substantial excavation would be conducted.

Wildland Fire Regulations

The California Public Resources Code includes fire safety regulations that would apply to construction activities at Perris Dam because the site is in an area designated by the California Department of Forestry and Fire Protection as a “Wildland Area That May Contain Substantial Forest Fire Risks and Hazards.” These regulations are described below.

In accordance with Section 4427 of the Public Resources Code, the use of equipment from which a spark, fire, or flame may be produced is prohibited on days when burning permits are required unless: (1) all flammable material has been removed to a distance of 10 feet, and (2) appropriate fire suppression equipment including a round-point shovel and backpack pump water-type fire extinguisher are ready for use at the immediate area during the operation. The types of equipment covered by this restriction include any motor, engine, boiler, stationary equipment, welding equipment, cutting torches, tarpots, or grinding devices. This requirement does not apply to portable power saws and other portable tools powered by a gasoline-fueled internal combustion engine.

In accordance with Section 4428 of the Public Resources Code, the use of vehicles, machines, tools, or equipment powered by an internal combustion engine operated on hydrocarbon fuels in an industrial operation located near any forest, brush, or grass-covered land is prohibited from April 1 to December 1 of any year, or at any other time when ground litter and vegetation will sustain combustion permitting the spread of fire, without providing and maintaining the appropriate equipment exclusively designated for firefighting purposes. The required equipment includes:

- A sealed box of tools located within the operating area, at a point accessible in the event of a fire. The tool box shall contain one backpack pump-type fire extinguisher filled with water, two axes, two McLeod fire tools, and a sufficient number of shovels so that each employee at the operation can be equipped to fight fire.

- One or more serviceable chain saws of 3½ or more horsepower with a cutting bar of 20 inches in length or longer shall be immediately available within the operating area, or a full set of timber felling tools shall be located in the fire tool box.
- Each passenger vehicle used on the operation shall be equipped with one shovel and one ax, and any other vehicle or tractor used in the operation shall be equipped with one shovel.

In accordance with Section 4431 of the Public Resources Code, the use of portable saws, augers, drills, tamper, or other portable tool powered by a gasoline fueled internal combustion engine is prohibited on forest-, brush-, or grass-covered lands within 25 feet of any flammable material when burning permits are required without providing the required fire suppression equipment. The required equipment includes one serviceable round-point shovel or one serviceable fire extinguisher; this equipment must be maintained within 25 feet of the operation of the tool, with unrestricted access for the operator from the point of operation.

In accordance with Section 4442 of the Public Resources Code, use of equipment equipped with an internal combustion engine that uses hydrocarbon fuels is prohibited on forest-, brush-, or grass-covered lands unless the equipment is equipped with a spark arrestor.¹

Regulatory Database Review

A regulatory database review was conducted by EDR, Inc to identify permitted hazardous materials usage and environmental cases within ASTM International search distances from the Perris Dam Area (EDR, 2007). These databases are described in the following sections.

Federal Regulatory Databases

Federal agencies publish numerous lists of sites that track permitted uses of hazardous materials and environmental cases. The lists reviewed for this EIR are summarized in **Table D-1**. They include:

- The National Priority List (NPL), which is a subset of the CERCLIS database (described below) and includes priority sites for cleanup under the federal Superfund Program.
- The Proposed NPL sites (Proposed NPL), which includes sites proposed for addition to the NPL.
- Superfund Consent Decrees (CONSENT), which includes NPL sites with major legal settlements that establish responsibility and standards for cleanup.
- Records of Decision (ROD), list which includes NPL sites where a record of decision has been developed that mandates a permanent remedy and includes technical and health information to aid in the cleanup of the site.

¹ A spark arrestor is a device that prohibits exhaust gases from an internal combustion engine from passing through the impeller blades where they could cause a spark. A carbon trap is commonly used to retain carbon particles from the exhaust.

**TABLE D-1
FEDERAL REGULATORY DATABASES REVIEWED**

Name of List	Responsible Agency	Acronym	Date of List
National Priority List	USEPA	NPL	7/18/07
Proposed National Priority List Sites	USEPA	Proposed NPL	4/20/07
Superfund Consent Decrees	USEPA	CONSENT	4/13/07
Records of Decision	USEPA	ROD	6/8/07
National Priority List Deletions	USEPA	Delisted NPL	4/20/07
Comprehensive Environmental Response, Compensation, and Liability Information System	USEPA	CERCLIS	4/23/07
CERCLIS – No Further Remedial Action Planned	USEPA	CERCLIS NFRAP	6/21/07
Engineering Controls Site List	USEPA	US ENG CONTROLS	4/20/07
Sites With Institutional Controls	USEPA	US INST CONTROLS	4/20/07
Toxic Chemical Release Inventory System	USEPA	TRIS	12/31/05
Emergency Response Notification System	USEPA	ERNS	12/31/06
Hazardous Materials Information Reporting System	USDOT	HMIRS	3/5/07
Resource Conservation and Recovery Act	USEPA	RCRA	6/13/06
Biennial Reporting System	USEPA	BRS	12/31/05
RCRA Corrective Action Sites	USEPA	CORRACTS	6/26/07
RCRA Administrative Action Tracking System	USEPA	RAATS	4/17/95
Department of Defense Sites	USGS	DOD	12/31/05
Formerly Used Defense Sites	USACOE	FUDS	12/31/05
Facility Index System	USEPA	FINDS	4/12/07
PCB Activity Database System	USEPA	PADS	4/12/07
Toxic Substances Control Act	USEPA	TSCA	12/31/02
Federal Insecticide, Fungicide and Rodenticide Act/ TSCA	USEPA	FTTS	4/13/07
Federal Insecticide, Fungicide and Rodenticide Act/ TSCA	USEPA	FTTS INSP	4/13/07
Section 7 Tracking System	USEPA	SSTS	12/31/05
Material Licensing Tracking System	NRC	MLTS	4/5/07
Underground Storage Tanks on Indian Land	USEPA	INDIAN UST	6/18/07
Leaking Underground Storage Tanks on Indian Land	USEPA	INDIAN LUST	5/30/07
Indian Reservations	USGS	INDIAN RESERV	12/31/05
Mines Master Index File	MSHA	MINES	5/9/07
Uranium Mill Tailings Sites	USDOE	UMTRA	12/31/05
Open Dump Inventory	USEPA	ODI	6/30/85

SOURCE: EDR, 2007

- NPL Delisted sites (Delisted NPL), which includes sites that have been removed from the NPL because no further response is required in accordance with criteria contained in the National Oil and Hazardous Substances Pollution Contingency Plan.
- The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), which tracks potentially contaminated properties identified under the Comprehensive Environmental Response, Compensation, and Liability Act and the Superfund Amendments and Reauthorization Act.
- The CERCLIS No Further Action (CERCLIS-NFRAP) database, which lists sites where, following an initial investigation, no contamination was found, contamination was removed quickly, or the contamination was not serious enough to require federal Superfund action or NPL consideration. As part of the U.S. EPA's Brownfields Program, these sites have been removed from the CERCLIS database to lift unintended barriers to redevelopment.
- The Engineering Controls Site List (US ENG CONTROLS), which includes sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods that prevent human contact with or a release to the environment of hazardous materials left in place at a site.
- Sites with Institutional Controls (US INST CONTROLS), which includes sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post-remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of institutional controls.
- The Toxic Chemical Release Inventory System (TRIS), which identifies sites that release chemicals to the air, water, or land as required by Title III of the Superfund Amendments and Reauthorization Act of 1986.
- The Emergency Response Notification System (ERNS), which identifies spills of oil or hazardous substances reported pursuant to Section 103 of CERCLA as amended, Section 311 of the Clean Water Act, and Sections 300.51 and 300.65 of the National Oil and Hazardous Substances Contingency Plan.
- The Hazardous Materials Information Reporting System (HMIRS), which includes hazardous material spill incidents that were reported to the U.S. Department of Transportation.
- Resource Conservation and Recovery Act (RCRA), which includes facilities permitted to handle hazardous wastes under RCRA, including treatment, storage, and disposal facilities (RCRA-TSD); large-quantity generators that report generation of greater than 1,000 kilograms per month of nonacutely hazardous waste or 1 kilogram per month of acutely hazardous waste (RCRA-LQG); and small-quantity generators that report generation of less than 1,000 kilograms per month of nonacutely hazardous waste or 1 kilogram per month of acutely hazardous waste (RCRA-SQG).
- Biennial Reporting System (BRS), which is a national system administered by the U.S. EPA that collects data on the generation and management of hazardous wastes. RCRA large-quantity generators and treatment, storage, and disposal facilities are included.

- RCRA Corrective Action Sites (CORRACTS), which includes RCRA-permitted facilities that are undergoing corrective action. A corrective action order is issued when there has been a release of hazardous waste or constituents into the environment from a RCRA facility. Corrective actions may be required beyond the facility's boundary and can be required regardless of when the release occurred, even if it predates RCRA.
- RCRA Administrative Action Tracking System (RAATS), which includes enforcement actions taken under RCRA pertaining to major violations, including administrative and civil actions brought by the U.S. EPA.
- Department of Defense Sites (DOD), which includes federally owned or administered lands, administered by the Department of Defense, that have an area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.
- Formerly Used Defense Sites (FUDS), which includes formerly used defense site properties where the U.S. Army Corps of Engineers is actively working or will take necessary cleanup actions.
- Facility Index System (FINDS), which includes facility information and "pointers" to other sources that contain more detail. The following databases are included in FINDS: Permit Compliance System (PCS), Aerometric Information Retrieval System (AIRS), Enforcement Dockets (DOCKET), Federal Underground Injection Control (FURS), Criminal Docket System (C-Docket), Federal Facilities Information System (FFIS), State Environmental Laws and Statutes (STATE), and PCB Activity Database System (PADS).
- PCB Activity Database System (PADS), which includes generators, transporters, commercial storers, and/or brokers and disposers of PCBs who are required to notify the U.S. EPA of such activities.
- Toxic Substances Control Act (TSCA) list, which includes manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list.
- Federal Insecticide, Fungicide, and Rodenticide Act/TSCA (FTTS) list, which includes administrative cases and pesticide enforcement actions and compliance actions related to the Federal Insecticide, Fungicide, and Rodenticide Act.
- Federal Insecticide, Fungicide, and Rodenticide Act/TSCA (FTTS INSP) list, which includes inspection information for cases regulated under the Federal Insecticide, Fungicide, and Rodenticide Act.
- Federal Insecticide, Fungicide, and Rodenticide Act/TSCA Section 7 Tracking System (SSTS) list, which includes registered pesticide-producing establishments required to submit a report to the U.S. EPA annually.
- The Material Licensing Tracking System (MLTS), which includes sites that possess or use radioactive materials that are subject to Nuclear Regulatory Commission licensing requirements.
- The Underground Storage Tanks on Indian Land (Indian UST) list, which includes permitted UST facilities on Indian land.

- Leaking Underground Storage Tanks on Indian Land (INDIAN LUST), which includes leaking underground storage tanks on Indian land in Arizona, California, New Mexico, and Nevada.
- Indian Reservations (INDIAN RESERV), which includes Indian administered lands of the United States that have an area equal to or greater than 640 acres.
- Mines Master Index File (MINES), which includes properties that have been involved in mining including coal mining, quarrying, or sand and gravel operations.
- Uranium Mill Tailings Sites (UMTRA), which includes former uranium ore mining sites where large piles of mill tailings remained after the uranium had been extracted from the ore.
- Open Dump Inventory (ODI), which is defined as a disposal facility that does not comply with one or more parts of Title 40 of the Federal Code of Regulations, Parts 257 or 258.

State Regulatory Databases

Regulatory databases to track the status of environmental cases are maintained by several state agencies. The state databases reviewed for this EIR are summarized in **Table D-2**. They include:

- The California Bond Expenditure Plan (CA BOND EXP PLAN) includes sites for which a site-specific expenditure plan has been prepared for the appropriation of California Hazardous Substance Cleanup Bond Act of 1984 funds. This list is no longer updated.
- The Spills, Leaks, Investigation, and Cleanup Cost Recovery Listing (SLIC Reg2), which include various sites within the jurisdiction of the San Francisco Bay Regional Water Quality Control Board.
- Statewide SLIC Cases (SLIC), which is maintained by the State Water Resources Control Board and includes a statewide list of SLIC cases.
- Calsites (HIST CAL-SITES), which was previously referred to as the Abandoned Sites Program Information System (ASPIS), identifies potential hazardous waste sites, which are then screened by the Department of Toxic Substances Control (DTSC) for further action. Sites on this list that are designated for no further action by the DTSC were removed from this list in 1996.
- Voluntary Cleanup Program Properties (VCP), which includes low-threat-level properties with either confirmed or unconfirmed releases, and the project proponents have requested that the DTSC oversee investigation and/or cleanup activities.
- The Leaking Underground Storage Tank Information System (LUST), which is an inventory of sites with reported leaking underground storage tank incidents maintained by the State Water Resources Control Board.
- The Fuel Leak List (LUST Reg9), which tracks remediation status of known leaking underground tanks.

**TABLE D-2
STATE AND LOCAL REGULATORY DATABASES REVIEWED**

Name of List	Responsible Agency	Acronym	Date of List
California Bond Expenditure Plan	DHS	CA BOND EXP PLAN	1/1/89
Spills, Leaks, Investigation, and Cleanup Cost Recovery Listing	CRWQCB	SLIC Reg8	7/17/07
Statewide SLIC Cases	SWRCB	SLIC	8/3/07
Voluntary Cleanup Program Properties	DTSC	VCP	5/29/07
Leaking Underground Storage Tank Information System	SWRCB	LUST	7/10/07
Leaking Underground Storage Tank Report	CRWQCB	LUST Reg9	3/1/01
Waste Management Unit Database	SWRCB	WMUDS/SWAT	4/1/00
Cortese Hazardous Waste and Substances Sites List	Cal EPA	CORTESE	4/1/01
Toxic Pits Cleanup Act Sites	SWRCB	TOXIC PITS	7/1/95
Waste Discharge System	SWRCB	CA WDS	6/19/07
School Property Evaluation Program	DTSC	SCH	5/29/07
California Hazardous Material Incident Report System	Cal OES	CHMIRS	12/31/05
Hazardous Waste Information System	Cal EPA	HAZNET	12/31/05
Facility Inventory Database	Cal EPA	CA FID UST	10/31/94
Calsites Database	DTSC	HIST CAL-SITES	8/8/05
Dry Cleaner Facilities	DTSC	DRYCLEANERS	7/31/07
Emissions Inventory Data	CARB	EMI	12/31/05
Statewide Environmental Evaluation and Planning System	SWRCB	SWEEPS UST	6/1/94
EnviroStor Database	DTSC	ENVIROSTOR	5/29/07
Riverside County LUST Sites List	RCDPH	LUST	5/21/07

SOURCE: EDR, 2007

- The Waste Management Unit Discharge System (WMUDS/SWAT), which tracks waste management units. The list contains sites identified in the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, Solid Waste Assessment Test (SWAT) Program Information, SWAT Report Summary Information, Chapter 15 Information, Chapter 15 Monitoring Parameters, Toxic Pits Cleanup Act Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.
- Cortese Hazardous Waste and Substances Sites List (CORTESE), which includes sites designated by the State Water Resources Control Board (LUST cases), Integrated Waste Board (SWF/LS), and the DTSC (CAL-SITES).
- Toxic Pits Cleanup Act Sites (TOXIC PITS), which includes sites suspected of containing hazardous substances where cleanup has not yet been completed.

- The Waste Discharge System (CA WDS), which lists sites that have been issued waste discharge requirements.
- School Property Evaluation Program (SCH), which includes proposed and existing school sites that are being evaluated by DTSC for possible hazardous material contamination. In some cases, these properties may be listed in the Cal-Sites category, depending on the level of threat they pose to public health and safety or to the environment.
- California Hazardous Materials Incident Reporting System (CHMIRS), which includes reported hazardous materials accidental releases or spills.
- The Hazardous Waste Information System (HAZNET), which includes facility and manifest data for sites that file hazardous waste manifests with the DTSC. The information contained in the database is based on manifests submitted without correction, and therefore may contain some invalid information.
- The Facility Inventory Database (CA FID UST), which is a historical listing of active and inactive underground storage tank locations. Local records should contain more current information.
- The Dry Cleaner Facilities database (DRY CLEANERS), which lists drycleaner-related facilities that have EPA identification numbers.
- Emissions Inventory Database (EMI), which includes sites for which the California Air Resources Board and local air pollution control agencies have collected toxic and criteria pollutant emission data.
- The Statewide Environmental Evaluation and Planning System (SWEEPS UST), which is a listing of underground storage tank sites that was prepared for the State Water Resources Control Board in the early 1980s, but is no longer maintained or updated.
- The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.
- The Leaking Underground Storage Tank Incident Reports (LUST) records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Local Regulatory Databases

The Riverside County Department of Public Health Underground Storage Tank Cleanup Sites List (LUST) tracks sites in Riverside County with LUSTs. This database is listed in **Table D-2**.

Other Databases Reviewed and Features Identified

In addition to the regulatory databases described above, the database review included review of the Former Manufactured Gas Plants, Historical Auto Stations and Historical Cleaners databases provided by EDR, Inc. and identified oil/gas pipelines and electrical transmission lines, sensitive receptors, flood zones, and wetlands.